Tracking and Monitoring Progress

Effectively communicating progress on the restoration of the Chesapeake Bay to all stakeholders and the general public is an essential component of this implementation plan. Timely and accurate reports on BMP implementation and subsequent changes in water quality keep all responsible parties accountable for making progress and educate the public about the connections between watersheds, water quality, and the ecosystem's resiliency.

Past restoration progress reports have focused on a myriad of disparate indicators of ecosystem health or depended heavily on complex computer models with many assumptions that integrated watershed health with water quality. While these efforts are helpful and were often ahead of their time, a new, more integrated and comprehensive approach to reporting restoration progress is necessary to avoid confusing and sometimes conflicting Bay health messages.

Starting in August 2004, a group of scientists and communicators sponsored by the EPA Chesapeake Bay Program, representing all six Bay watershed States and the District of Columbia, met to map out a new approach to reporting Bay restoration progress. The outcome is a series of four annual reports providing regular communications to stakeholders and the public on the restoration and health of the Chesapeake Bay and its watershed. The reports will provide an assessment of what restoration actions are taking place in the Bay watershed and in Maryland; how these actions influence the stressors on the Bay; and, in turn, how all this affects the Bay's health.

Specifically, the information will include the following:

- **Chesapeake Bay and Watershed Restoration:** A report on indicators used to measure and communicate specific actions being implemented to improve the Chesapeake Bay's health. Examples include agricultural BMPs, wastewater treatment upgrades, land use changes, changes in impervious cover, fisheries management actions, etc.

- **Chesapeake Bay and Watershed Stressors:** A report on indicators used to measure conditions and factors that are affecting the Bay's health. For example, monitored loading of nutrients and sediments entering the Bay each year, harvest of fish and shellfish, etc.

- **Chesapeake Bay Ecosystem Health:** A report of indicators used to assess the ecosystem health of the Chesapeake Bay and its tidal tributaries. When the necessary information is available, a similar, but separate group of indicators

for the nontidal rivers, stream corridors, and surrounding watersheds will also be developed. Examples include the extent of the Dead Zone, or anoxic area, in the Bay; measures of water clarity and algal growth; and populations of keystone fisheries.

Communication Strategy

The EPA Chesapeake Bay Program and DNR will communicate these indicators of progress, providing an overall baywide prospective as well as tributary basin and watershed level details. Baywide information will be communicated through a series of four reports with Maryland-specific information reported as part of the larger reports on a periodic basis and as requested throughout the year.

The four annual reports include the following:

1. A late spring forecast of water quality in the mainstem of the Chesapeake Bay for the coming summer months. This includes a prediction of the extent of the anoxic zone in the Bay, possible outbreaks of harmful algal blooms in the Potomac River and other tributaries (future), and expected changes in submerged aquatic vegetation coverage in Maryland and baywide.

2. A fall report of actual water quality from the previous summer, including an explanation of how conditions compared to forecasts and highlights of the impacts of weather, management practices, and other factors on observed water quality.

3. A winter report to comprehensively assess the implementation of restoration actions to reduce the flow of nutrients and sediments to the Bay. This will include BMP implementation, upgrades to wastewater treatment plants, the extent of impervious surface cover in developed areas, land preservation, air quality controls, etc.

4. In early spring of each year, an annual assessment of the key indicators of the Chesapeake Bay's health will be reported. This report will provide an integrated assessment of Chesapeake Bay ecosystem conditions, including water quality, fisheries, resource populations, and forage and habitat for important Bay fisheries.

The first of these reports was released in the late spring of 2005. Data and analysis for the remaining reports are being compiled in hopes of providing timely updates to stakeholders and the public on the state of the Chesapeake Bay and the health of its watershed. As information and tracking processes improve, these reports will be more timely and will provide more, readily understood assessments on how the Bay is doing and whether Maryland is fulfilling its commitment to implement BMPs and restore water quality in the Chesapeake Bay and its tributaries.